

REMARKS

Claims 1-21, 23-25, 27, and 34-49 are pending in this application. The objection to the claims and the rejections under 35 USC 112 have been addressed by this amendment. Claims 22, 26, and 28-33 have been cancelled. Claims 48 and 49 have been added. No new matter has been introduced as a result of these amendments.

Rejections Under 35 USC 112

The claims have been amended to address each of the Examiner's rejections under 35 USC 112. With reference to claims 34-42, an input arbiter is an arbiter associated with an input port, while an output arbiter is an arbiter associated with an output port. The claims have been amended to state this more clearly. With regard to claim 45, the Examiner is referred to Figure 8 and the corresponding text on pages 13 and 14. As defined in the specification the first stage arbiters perform the grant on a per input port basis, while the second stage arbiters perform the grant on a per output port basis. The first and second stage arbiters perform these functions in parallel, i.e., at the same time period  $t_1$ . Then, at a second time period, the first stage arbiters perform the grant on a per output port basis, while the second stage arbiters perform the grant on a per input port basis, based on the grants generated during the first time period. In an effort to move prosecution along, the Applicants have amended first and second stage arbiters to first and second arbiters.

**Rejections Under 35 USC 102**

In light of the amendments to claims 1 and 11, the Applicants respectfully request the removal of the rejections under 35 USC 102 as being anticipated by US Patent No. 5,500,858 to McKeown. Claims 1 and 11 include the feature of determining if any of the plurality of links unassociated with the candidate packet has a corresponding weight value greater than the weight value of the link; and if the corresponding weight value greater than the weight value of the link, then the method includes, decreasing the corresponding weight value. Nowhere does McKeown discuss penalizing non-backlogged high weight value links to eliminate burstiness as specified in claims 1 and 11. Applicants would also like to point out that new claims 48 and 49, further specify that this penalty is applied according to a link bandwidth. Claims 2-10, and 12-19, depend from claims 1 and 11, respectively, and are not anticipated by McKeown for at least these reasons.

Claims 20 and 24 have been amended to include the feature of a second plurality of arbiters each being uniquely associated with its own input port from the plurality of input ports, the second plurality of arbiters operating in parallel with each other and with the first plurality of arbiters (the features of cancelled claims 22 and 26, respectively, with the additional feature that the first and second plurality of arbiters operate in parallel with each other). Applicants respectfully request that the Examiner reconsider this rejection as McKeown operates in a sequential manner not a parallel manner. As illustrated in Figure 6 of McKeown, the requests are generated, then the grants are generated, and the acceptances thereafter (see column 7, lines 31-40). Furthermore, McKeown only functions on an input port basis and not on a per-input port and a per-output port basis in parallel, as specified in claims 20 and 24. It should be noted that in order to modify

McKeown to function as specified in claims 20 and 24 would require a major redesign that would change McKeown from its intended purposes.

Claim 34 includes the features of determining, in a first time slot, a plurality of grants associated with a plurality of arbiters associated with output ports; and determining, in the first time slot, a plurality of grants associated with a plurality of arbiters associated with input ports. The Examiner refers to column 4, lines 36 and 37 and column 7, lines 16-42. The reference to column 4 discusses filling a queue with data and the reference to column 7, which discusses Figure 6, discusses the sequential nature of McKeown as noted above. Claim 34 specifies determining grants associated with input ports and output ports within the same time slot, i.e., in parallel. McKeown does not teach or disclose this. Applicants respectfully request that the Examiner elaborate how a reference to filling a queue and the sequential nature of McKeown can disclose the features of claim 34. Claims 35-38 are dependent on claim 34 and allowable for at least the same reasons.

Claim 39 also specifies the features of determining the grant for the first input arbiter being performed in parallel with the determining the grant for the first output arbiter and determining the accept for second output arbiter being performed in parallel with the determining the accept for the second input arbiter. Here again, the parallel nature and the per-input/per-output port basis of the current invention are not disclosed by McKeown, as McKeown is restricted to sequential processing as illustrated in Figure 6. Claims 40 and 41 depend from claim 39 and are allowable for at least the above stated reasons.

Claim 42 also includes the feature that determining for the first input port being performed in parallel with the determining for the first output port. As discussed above, McKeown is incapable of accomplishing this feature and does not disclose this feature.

Applicants respectfully request that the Examiner point out where in McKeown where the determining of the links for the input ports and the output ports is performed in parallel if this rejection is maintained. Applicants, acknowledge the allowable subject matter noted by the examiner in claims 43 and 44, however, the Applicants would like the Examiner to reconsider the allowance of claim 42 based on the above noted difference between McKeown and the claimed invention.

Claim 45 includes the feature of each first arbiter from the plurality of first arbiters sending its own grant signal to a second arbiter from the plurality of second arbiters during a first time slot, each second arbiter from the plurality of second arbiters sending its own grant signal to a first arbiter from the plurality of first arbiters during the first time slot. Here the parallel nature is specified as the grant signals are exchanged during the first time slot and on a per-input port/ per-output port basis. McKeown does not perform this feature. Claims 46 and 47 depend from claim 45 and are allowable for at least the above stated reasons.

Applicants respectfully request a Notice of Allowance based on the foregoing remarks. If the Examiner has any questions concerning the present amendment, the Examiner is kindly requested to contact the undersigned at (408) 774 6921. If any other fees are due in connection with filing this amendment, the Commissioner is also

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O I P E I A P S T  
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U S P S  
authorized to charge Deposit Account No. 50-0805 (Order No. ALTEP034C). A copy of  
the transmittal is enclosed for this purpose.

Respectfully submitted,  
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